

frequency 13.56MHz. Argon is flowed into the chamber. Bias source 430 helps ionize the argon. Coil 460 generates an RF electromagnetic field to densify the argon plasma, making the plasma high density. The argon ions dislodge titanium atoms from target 420. Some of the titanium atoms become ionized by the high density plasma. The titanium atoms and ions settle on wafer 102. See "Handbook of Semiconductor Manufacturing Technology" (edited by Yoshio Nishi et al., 2000), pages 395-413, incorporated herein by reference.



[0038] Isolation trenches 560 (Figs. 6 and 7B) in substrate 104 are filed with dielectric 564 ("field oxide"), which is silicon dioxide in some embodiments. Dielectric 564 provides isolation between the active areas of the memory array. The trench boundaries are shown at 560B in Fig. 6. The trenches extend in the bitline direction between adjacent source lines 544. Each trench 560 passes under two rows of the array and projects from under the respective control gate lines 528 into the source lines.



[0042] In the cross section of Fig. 7B, the height of each stack 532 is about 0.3 μm . The width of the cobalt silicide line 210 is about 0.13 μm to 0.21 μm . The width of each dielectric feature 534 at the bottom is about 0.02 μm to 0.06 μm .

Enclosed is a copy of specification paragraphs 21, 38, and 42 annotated to indicate the changes to these paragraphs. In the annotated specification paragraphs, added material is in bold, and deleted material is in brackets.

IN THE CLAIMS

RONALD J. MEETIN Attorney at Law

210 Central Avenue Mountain View, CA 94043-4869 Tel: 650-964-9767 Fax: 650-964-9779



Add new Claims 8 - 25 as follows:

--8. A method comprising:

forming a cobalt layer over a body that comprises silicon;

forming a titanium layer over the cobalt layer by ionized physical vapor deposition; reacting cobalt of the cobalt layer with silicon of the body to form a cobalt silicide layer; and

Application No. 10/056,154